

Appln No. 10/731,385
Amdt date April 21, 2006
Reply to Office action of January 23, 2006

REMARKS/ARGUMENTS

The above identified patent application has been amended and reconsideration and reexamination are hereby requested.

Claims 1 - 25 are now in the application. Claims 12 and 16 have been amended.

The Examiner has objected to the title as not being adequately descriptive. The Applicant has provided a new title clearly indicative of the invention to which the claims are directed.

The Examiner has objected to Claims 12 and 16 as to informalities. The Applicant has amended Claims 12 and 16 to correct the informalities as suggested by the Examiner.

The Examiner has rejected under 35 U.S.C. §102(e): Claims 1 - 5, 8, 16 - 21 and 23 - 25 as being anticipated by Jaskie et al.; Claims 9, 12, 13 and 15 as being anticipated by Toyota et al. The Examiner has also rejected under 35 U.S.C. §103: Claim 6 as being unpatentable over Jaskie et al in view of Nishimura; Claim 7 as being unpatentable over Jaskie et al in view of Peng; Claim 10 as being unpatentable over Toyota et al in view of Jaskie et al.; Claim 11 as being unpatentable over Toyota et al.; Claim 14 as being unpatentable over Toyota et al in view of Peng; and Claim 22 as being unpatentable over Jaskie et al.

The Applicant's Claim 1 calls for (underlining added for emphasis) ... wherein the illumination assembly includes (a) a transparent conductive layer formed on a surface of the second substrate, and having an anode input terminal that extends outside the vacuum assembly and to which an anode voltage is applied, ...

The Applicant's Claim 23 calls for (underlining added for emphasis) ... a transparent conductive layer formed on a surface of the substrate, and having an anode input terminal to which an anode voltage is applied, the anode input terminal extending outside the vacuum assembly;

As such, the Applicant submits that Claims 1 and 23 are not anticipated by Jaskie et al. under 35 U.S.C. §102(e).

Jaskie et al., while providing for a transparent conductive layer anode 124, merely shows schematically an independently controlled voltage source 118 connected to anode 124. As such,

Appln No. 10/731,385
Amdt date April 21, 2006
Reply to Office action of January 23, 2006

it does not show a transparent conductive layer having an anode input terminal that extends outside the vacuum assembly. In fact, it does not show any input terminal at all or where it would be located. For example, where is the input voltage being physically supplied to the anode, e.g., inside or outside of the spacers 134? Such physical connections become significant, as pointed out by the Applicant in the Specification at page 3, lines 1 - 14, when describing terminal problems encountered by and affecting the overall operation of conventional field emission displays (underlining added for emphasis):

"However, there are problems associated with metal layer 5, and in particular, with metal layer 5 made of aluminum. That is, although an adhesive strength of metal layer 5 is exceptional immediately following a layer forming process such as sputtering, if thermal deformation occurs as a result of a baking process following sputtering, the adhesivity of metal layer 5 is significantly reduced. Accordingly, metal layer 5 having undergone a baking process is easily separated from faceplate 1 such that it is unable to perform its function. This makes metal layer 5 unsuitable for use as a terminal that receives the anode voltage.

Further, the strength of metal layer 5 is reduced for the above reasons such that metal layer 5 is damaged in the vicinity of sealant 7. This reduces the degree of vacuum in the FED, negatively affecting the overall operation of the display."

Accordingly, the Applicant submits that Claim 1 and 23 are not anticipated by Jaskie et al. under 35 U.S.C. §102(e).

Claims 2 - 8 are dependent on Claim 1. Claims 24 and 25 are dependent on Claim 23. As such, these claims are believed allowable based upon Claims 1 and 23.

The Applicant's Claim 16 calls for (underlining added for emphasis) ... a faceplate including a faceplate interior side; ... a backplate including a backplate interior side in an opposing relationship to the faceplate interior side; ... side walls positioned between the faceplate and the backplate to form an enclosed vacuum envelope between the side walls, the backplate interior side and the faceplate interior side; ... a phosphor layer positioned on the faceplate

Appln No. 10/731,385
Amdt date April 21, 2006
Reply to Office action of January 23, 2006

interior side; ... a metal layer positioned on the phosphor layer, wherein the metal layer is formed within the vacuum envelope.

As such, the Applicant submits that Claim 16 is also not anticipated by Jaskie et al. under 35 U.S.C. §102(e).

Jaskie et al., while providing for a metal layer 128 on a phosphor 126 and the metal layer being formed within the vacuum envelope, does not provide for the phosphor layer positioned on the faceplate interior side. Jaskie et al.'s phosphor layers 126 are positioned on the anode 124.

Accordingly, the Applicant submits that Claim 16 is not anticipated by Jaskie et al. under 35 U.S.C. §102(e).

Claims 17 - 22 are dependent on Claim 16. As such, these claims are believed allowable based upon Claim 16.

The Applicant's Claim 9 calls for (underlining added for emphasis) ... wherein the illumination assembly includes a phosphor screen formed on a surface of the second substrate, a metal layer formed on the phosphor screen within the vacuum assembly, and an anode input terminal formed extending from within the vacuum assembly to outside of the same, in which an end of the anode input terminal within the vacuum assembly contacts the metal layer to be electrically connected to the metal layer.

As such, the Applicant submits that Claim 9 is not anticipated by Toyota et al. under 35 U.S.C. §102(e).

Toyota et al., while providing for an anode electrode 33 connected to an anode-electrode control circuit 42, does not show an anode input terminal formed extending from within the vacuum assembly to outside of the same, in which an end of the anode input terminal within the vacuum assembly contacts the metal layer to be electrically connected to the metal layer. As with Jaskie et al., where is the input voltage being physically supplied to the anode electrode, e.g., inside or outside of the spacers 134? Such terminal connection, as discussed above, can affect the overall field emission display operation.


Accordingly, the Applicant submits that Claim 9 is not anticipated by Toyota et al. under 35 U.S.C. §102(e).

Appln No. 10/731,385
Amdt date April 21, 2006
Reply to Office action of January 23, 2006

Claims 10 - 15 are dependent on Claim 9. As such, these claims are believed allowable based upon Claim 9.

Therefore, in view of the above amendment and remarks it is submitted that the claims are patentably distinct over the prior art and that all the rejections to the claims have been overcome. Reconsideration and reexamination of the above Application is requested.

Respectfully submitted,
CHRISTIE, PARKER & HALE, LLP

By 
Fariba Sirjani
Reg. No. 47,947
626/795-9900

RJP/cah

CAH PAS665580.1-*04/21/06 9:04 AM